XXIII.—Notes on the Natural Habitat of the Common Potato; and on its Introduction into Europe. By George Ord, Esq., Philadelphia. Communicated by Sir W. Jardine, Bart.

To Richard Taylor, Esq.

DEAR SIR,

I HAVE the pleasure to send you a paper on the "Natural Habitat of the Potato," from an esteemed and intelligent correspondent in Philadelphia, Mr. Ord; and while that communication will be interesting to all classes of your readers, whether they are botanists or agriculturists, or mere scekers after general information, it has been accompanied by a private letter, which I consider of even more importance, as pointing out the state of the disease in that root in a cultivated part of the New World,—the opinions and feelings that are held regarding it there, as well as of our endeavours to account for it and to arrest its progress. I do not think that I shall be committing any breach of confidence to my correspondent in prefacing his paper by some extracts from the letter in question; at all events, I trust he will only attribute my doing so to a wish to communicate as much information as possible upon a subject far more important to us than it can ever be to our brethren across the Atlantic.

Believe me, Sir, very sincerely, yours

W. J.

MY DEAR SIR, Philadelphia, 28th Dec. 1845.

Your letter of the 21st of November was received by me on the 20th instant, together with the printed slips on the subject of the potato disease, which it appears has occasioned great alarm

in various parts of Europe.

The summer of this year has certainly been most unpropitious to the cultivation of the potato, not only in your country but also in this; for our later crop has proved to be of inferior quality and the produce has been scant; and in many places the disease in question has affected the tubers in the manner described in the British publications on the subject. With us a wet and cold season is greatly injurious to this vegetable. Frequent showers when the plant is immature are beneficial, but when the tubers approach to maturity, temperate and dry weather is necessary to bring them to perfection. Had the last summer with you not been extraordinary for the quantity of rain which fell, and the low temperature of the atmosphere, you would have had no reason to complain of the scantiness of your crops or of the destruction occasioned by the rot. In Pennsylvania we have two crops of potatos, those planted at the opening of the spring, in-

tended for summer use, and those planted about the latter end of May. Our first produce this year was most excellent; but the latter crop, as I have stated above, is of very inferior quality, occasioned it is said by superabundant wetness when the tubers had received their full growth.—In the list of your printed queries it is asked, "Do plants die out?" "Is the potato dying out?" I would answer that I know of no instance of plants dying out, nor do I believe that the potato is dying out; and should your next summer be exempted from superabundant rains and be favoured with more genial heat than the last, all your investigations, chemical, botanical and entomological, would be found to be superfluous.

You may even spare yourselves the trouble of sending to America for seed, your own being infinitely better than any which we could furnish you with. It takes many years for potatos to become acclimated. Should you plant exotic tubers, it is probable that you would have no reason to be satisfied with the result. In Pennsylvania the most esteemed kind is known under the name of Mercer; some of these were planted at my instance by Charles Waterton, Esq., at Walton Hall, Yorkshire, a few years ago, but the produce was not considered equal to that of the English varieties. I once made the experiment of planting for three successive years, the Irish variety called Rose Potato; every care was taken to promote success, a suitable soil and exposure were selected, and the ordinary tillage was attended to with exactness. The first year the produce was inferior to the seed as respected quality, the next year an evident deterioration had taken place both as to quality and quantity, and the third year the product was of so little value that it was cast to the hogs; during all the three seasons mentioned my Mercer potato exhibited no change.

The present year here is remarkable for another accident in the vegetable kingdom. The European walnut (Juglans regia) presented a great display of fruit in the month of June, but a coleopterous insect had deposited its eggs in the green nuts in such quantities, that at the usual period of maturity the kernels were found to be entirely destroyed. I have in my garden two trees which bore bushels of fruit, none of which escaped the ra-

vages of the larvæ of the insects.

I am inclined to believe that your agriculturists by their recent publications have created an unnecessary panic on the occasion of the potato rot: we make no stir here when any of our crops fail; people discourse of the event it is true, but we appoint no committee of scientific men to investigate the cause of the failure; the greater the evil, the more earnestly do we set about to palliate it.

I learn from the public prints that the diseased roots have